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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/930,097	08/15/2001	Indermohan S. Monga	120-176	1004

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McGUINNESS & MANARAS LLP
125 NAGOG PARK
ACTON, MA 01720

EXAMINER	
ALAM, UZMA	
ART UNIT	**PAPER NUMBER**
2157	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	09/930,097	MONGA ET AL.	
	Examiner	Art Unit	
	Uzma Alam	2157	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *08 May 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12 and 14-36* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12 and 14-36* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date ____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to the arguments filed May 8, 2007. Claims 1-12, 14-36 are pending. Claims 1-12, 14-36 represent a method for provisioning bandwidth.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-12, 14-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sistanizadeh et al. US Patent No. 6,681,232 in view of Burton et al. et al. US Patent No. 5,572,347. Sistanizadeh teaches the invention as claimed including a method for provisioning bandwidth (see abstract). Burton et al. teaches provisioning an optical network (see abstract).

As per claims 12 and 24 Sistanizadeh teaches the device comprising:

a user application requiring communication services from an optical communication network (column 7, lines 40-47); and

and optical service agent for providing bandwidth management services for the user application (optical service logic; Figure 2; column 5, lines 34-55); and

an optical service server operative to authenticate the user, obtain network topological information, and to employ the network topological information on behalf of the optical service agent for providing bandwidth management services such that the network topological

information is not exposed to the user (provisioning service module, authenticates user and user has options to increase or decrease bandwidth, but the user does not access the network topology, the topology is accessed by the provisioning service module column 21, lines 15-63).

Sistanizadeh does not teach in which data is processed and transported on in optical form, and including the provision of a new optical communication path between specified nodes in the optical communication network.

Burton et al. teaches in which data is processed and transported on in optical form, and including the provision of a new optical communication path between specified nodes in the optical communication network. See column 5, lines 9-15, column 6, lines 1-34, column 9, lines 56-67, column 13, lines 60-67; column 14, lines 1-7, column 15, lines 34-42.

It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the provision of Sistanizadeh with the all optical network of Burton et al. A person of ordinary skill in the art would have been motivated to do this to provide adequate provisioning of the backbone network (Sistanizadeh column 5, lines 54-64).

As per claims 1 Sistanizadeh teaches an optical service agent as in claim 12 for providing bandwidth management services for a user in an optical communication system, the optical service agent comprising:

a user-to-network interface (UNI) for interfacing with an optical communication network (column 7, lines 1-40);

a peer-to-peer interface for interfacing with peer users (personal computers; column 7, lines 1-40); and

optical service logic for interfacing with the optical communication network via the UNI and with the peer users via the peer-to-peer interface for providing said bandwidth management services for the user (SLM Application Server; column 5, lines 34-55; Figure 2); and

an optical service server operative to authenticate the user, obtain network topological information, and to employ the network topological information on behalf of the optical service agent for providing bandwidth management services such that the network topological information is not exposed to the user (provisioning service module, authenticates user and user has options to increase or decrease bandwidth, but the user does not access the network topology, the topology is accessed by the provisioning service module column 21, lines 15-63).
Sistanizadeh does not teach in which data is processed and transported on in optical form, and including the provision of a new optical communication path between specified nodes in the optical communication network.

Burton et al. teaches in which data is processed and transported on in optical form, and including the provision of a new optical communication path between specified nodes in the optical communication network. See column 5, lines 9-15, column 6, lines 1-34, column 9, lines 56-67, column 13, lines 60-67; column 14, lines 1-7, column 15, lines 34-42.
It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the provision of Sistanizadeh with the all optical network of Burton et al. A person of ordinary skill in the art would have been motivated to do this to provide adequate provisioning of the backbone network (Sistanizadeh column 5, lines 54-64).

As per claim 31, Sistanizadeh teaches a method for managing bandwidth for a user in an optical communication system, the method comprising at least one of:

Monitoring bandwidth utilization by an optical service agent in the user on a connection in the optical communication system (column 1, lines 45-67);

Controlling bandwidth utilization by an optical service agent in the user on a connection in the optical communication system (11, lines 34-64; column 15, lines 19-55);

Obtaining additional bandwidth by an optical service agent in the user on a connection in the optical communication system (column 19, lines 1-35);

Relinquishing unused bandwidth by an optical service agent in the user on a connection in the optical communication system (column 21, lines 45-67); and

Allocating bandwidth by an optical service agent in the user among multiple connections in the optical communication system (column 21, lines 45-67; column 22, lines 15-27; Figure 9);

Prior to which an optical service server executes the following steps:

authenticate the user, obtain network topological information, and to employ the network topological information on behalf of the optical service agent for providing bandwidth management services such that the network topological information is not exposed to the user (provisioning service module, authenticates user and user has options to increase or decrease bandwidth, but the user does not access the network topology, the topology is accessed by the provisioning service module column 21, lines 15-63).

Sistanizadeh does not teach in which data is processed and transported on in optical form, and including the provision of a new optical communication path between specified nodes in the optical communication network.

Burton et al. teaches in which data is processed and transported on in optical form, and including the provision of a new optical communication path between specified nodes in the

optical communication network. See column 5, lines 9-15, column 6, lines 1-34, column 9, lines 56-67, column 13, lines 60-67; column 14, lines 1-7, column 15, lines 34-42.
It would have been obvious to a person of ordinary skill in the art at the time of the invention to combine the provision of Sistanizadeh with the all optical network of Burton et al. A person of ordinary skill in the art would have been motivated to do this to provide adequate provisioning of the backbone network (Sistanizadeh column 5, lines 54-64).

As per claims 2, 14, and 25 Sistanizadeh and Burton et al. teach the optical service agent of claims 1, 13, 24 wherein the optical communication network comprises an automatically switched optical/transport network (ASON), and wherein the UNI comprises an ASON UNI (Sistanizadeh column 30, lines 19-32).

As per claims 3, 15 and 26 Sistanizadeh and Burton et al. teach the optical service agent of claims 1, 13 and 24 wherein the optical service logic comprises:

bandwidth monitoring logic for monitoring bandwidth utilization on a connection (Sistanizadeh column 17, lines 45-67; column 15, lines 18-35; column 19, lines 21-35).

As per claims 4, 16, and 27, Sistanizadeh and Burton et al. teach the optical service agent of claims 1, 13, and 24, wherein the optical service logic comprises:

bandwidth controlling logic for controlling bandwidth utilization on a connection (Sistanizadeh column 15, lines 20-55).

As per claims 5, 17 and 28 Sistanizadeh and Burton et al. teach the optical service agent of claims l, 13 and 24, wherein the optical service logic comprises:

bandwidth obtaining logic for obtaining additional bandwidth for a connection (Sistanizadeh column 11, lines 34-67; column 19, lines 1-20; column 21, lines 45-67; column 22, lines 15-27).

As per claims 6, 18 and 29, Sistanizadeh and Burton et al. teach the optical service agent of claims 1, 13, and 24, wherein the optical service logic comprises:

bandwidth relinquishing logic for relinquishing excess bandwidth for a connection (Sistanizadeh column 11, lines 34-67; column 19, lines 1-20; column 21, lines 45-67; column 22, lines 15-27).

As per claims 7, 19 and 30 Sistanizadeh and Burton et al. teach the optical service agent of claims 1, 13 and 24, wherein the optical service logic comprises:

bandwidth allocation logic for allocating bandwidth among multiple connections (Sistanizadeh column 11, lines 34-67; column 19, lines 1-20; column 21, lines 45-67; column 22, lines 15-27).

As per claims 8, 20 and 32 Sistanizadeh and Burton et al. teach the optical service agent of claims 4, 16 and 31 wherein the bandwidth controlling logic is operably coupled to prevent bandwidth utilization on the connection from exceeding a predetermined maximum bandwidth utilization (Sistanizadeh column 15, lines 20-55).

As per claims 9, 21 and 34, Sistanizadeh and Burton et al. teach the optical service agent of claims 5, 17 and 31 wherein the bandwidth obtaining logic is operably coupled to obtain the additional bandwidth for the connection upon determining that bandwidth utilization on connection exceeds a predetermined level (Sistanizadeh column 15, lines 18-35; column 17, lines 45-67; column 19, lines 21-35).

As per claims 10, 22 and 35, Sistanizadeh and Burton et al. teach the optical service agent of claims 6, 18 and 31 wherein the bandwidth relinquishing logic is operably coupled to relinquish excess bandwidth for the connection upon determining that bandwidth utilization on the connection is below a predetermined level (Sistanizadeh column 15, lines 20-55; column 11, lines 34-67; column 19, lines 1-35; column 21, lines 45-67; column 22, lines 15-27).

As per claims 11, 23 and 36 Sistanizadeh and Burton et al. teach the optical service agent of claims 7, 19 and 31 wherein the bandwidth allocation logic is operably coupled to identify an over-utilized connection and an under-utilized connection and to transfer traffic from the over-utilized connection to the under-utilized connection Sistanizadeh (column 15, lines 20-55; column 11, lines 34-67; column 19, lines 1-35; column 21, lines 45-67; column 22, lines 15-27).

As per claim 33, Sistanizadeh and Burton et al. teach the method of claim 32 wherein taking an action to prevent the bandwidth utilization from exceeding a predetermined maximum bandwidth utilization comprises dropping packets (Sistanizadeh column 15, lines 20-55; column 11, lines 34-67; column 19, lines 1-35; column 21, lines 45-67; column 22, lines 15-27).

Response to Arguments

3. Applicant's arguments with respect to claims 1-12 and 14-36 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Uzma Alam whose telephone number is (571) 272-3995. The examiner can normally be reached on Monday-Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ario Etienne can be reached on (571) 272-4001. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Uzma Alam
Ua
July 20, 2007

ARIO ETIENNE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100